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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,966	02/21/2002	Jeffrey R. Cobb	WILY-01008US0	9235

7590 04/05/2005	EXAMINER
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ART UNIT	PAPER NUMBER
2114	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	10/079,966	COBB ET AL.
	Examiner	**Art Unit**	
	Bryce P Bonzo	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 January 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-12,58,72,75 and 77* is/are allowed.

6)☒ Claim(s) *13,15-17,19,39,45,52,56,64 and 67* is/are rejected.

7)☒ Claim(s) *14,20-22,24-26,30-32,41-43,48-51 and 68-71* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-17,19-22,24-26,30-32,39,41,43,45,48-52,56,58,62,64,67-72,75 and 77.

FINAL OFFICIAL ACTION

Status of the Claims

Claims 39 and 52 are rejected under 35 USC §102.

Claims 13, 15-17, 19, 45, 56, 64 and 67 are rejected under 35 USC §103.

Claims 1-12, 58, 72, 75 and 77 are allowed.

Claims 14, 20-22, 24-26, 30-32, 41-43, 48-51 and 68-71 are objected to while

containing allowable matter.

Claim 75 is objected due to dependency informalities.

Objections for Informalities

Claim 75 depends from a non-existent (cancelled) claim. It is assumed to depend from

claim 72 for purposes of this Official Action. Appropriate action to correct this informality

is required.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 39 and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by

Os (United States Patent Application Publication 2002/0162053 A1).

As per claim 39, Os discloses:

receiving an indication that a particular method of an object is running (page 2,

¶18);

automatically determining whether said method has stalled by detecting whether

a thread a entered said method and did not return within an approximation of an

expected time frame (page 2, ¶27-28). Applicant defines that methods, routines and

threads are interchangeable terminology for the purposes of this application on page 6,

lines 5-8.

As per claim 52, Os discloses:

accessing object code for a first method (page 2, ¶18; Applicant defines that

methods, routines and threads are interchangeable terminology for the purposes of this

application on page 6, lines 5-8.);

automatically changing said code for said first method to call new code (page 2,

¶18: the code path is changed by calling the now hooked threads); and

using said new code to determine if said first method has stalled (page ¶18,

discloses checking for stalled threads).

Rejections under 35 USC §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described
as set forth in section 102 of this title, if the differences between the subject matter sought to
be patented and the prior art are such that the subject matter as a whole would have been
obvious at the time the invention was made to a person having ordinary skill in the art to which
said subject matter pertains. Patentability shall not be negatived by the manner in which the
invention was made.

Claims 13, 15-17, 19, 45, 56, 64 and 67 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Os (United States Patent Application Publication

2002/0162053 A1).

As per claim 13, Os discloses:

receiving an indication that a particular routine has started, said particular routine

is one of a plurality of routines that comprise a process (page 2, ¶18);

reporting said particular routine as stalled is said indication that said particular

routine has completed is not provided prior to being overdue. (page 2, ¶28).

Os does not explicitly disclose:

receiving an indication that said particular routine has completed, if said

particular routine has completed.

Official Notice is given that was well known at the time of invention by computer

programmers provide instructions to stop timers and carry out the stopping of timers in

monitoring systems in timeout monitoring systems (the supplied supporting evidence

cited shows this 1992 I the ream of removing watchdog timer thread inserted by hooking

as taught by Os). Providing these instructions to stop timers is crucial in timeout based

systems. This is because if the timer is not stopped, it will generate unwarranted

timeout error messages after what ever it is monitoring has successfully completed,

causing a system to report or take action for conditions which are not present. Thus it

would have been obvious to one of ordinary skill in the art at the time of invention to

incorporate the practice and instructions for stopping timers into the system OS thereby

creating a system which is less likely to create false error messages after a possible

error causing occurrence has successfully completed.

As per claim 15, Os discloses:

said particular routine is a thread (¶18, applicant specification page 6, lines 5-8

explicitly permits this interpretation).

As per claim 16, Os discloses:

said particular routine is a method ((¶18, applicant specification page 6, lines 5-8

explicitly permits this interpretation).

As per claim 17, Os discloses:

said steps of receiving an indication that a particular routine are started and

receiving an indication that a particular routine has completed include detecting whether

a thread enters said method and does not return with an approximation of an expected time frame (page 2, ¶27).

As per claim 19, Os discloses:

said indication that said particular routine has started is received from within said particular routine (page 2, ¶19); and

said indication that said particular routine has completed is received from within said particular routine (page 2, ¶19).

As per claim 45, Os discloses:

receiving an indication that a first routine has started (page 2, ¶18);

starting a timing mechanism in response to said indication that said first routine has started (page 2, ¶19);

reporting said first routine as stalled if said timing mechanism is not stopped prior to a determination that said timing mechanism is overdue (page 2, ¶28).

Os does not explicitly disclose:

receiving an indication that said first routine has completed, if said first routine has completed; and

stopping said timing mechanism in response to receiving said indication that said first routine has completed.

Official Notice is given that was well known at the time of invention by computer programmers provide instructions to stop timers and carry out the stopping of timers in monitoring systems in timeout monitoring systems (the supplied supporting evidence cited shows this 1992 I the ream of removing watchdog timer thread inserted by hooking as taught by Os). Providing these instructions to stop timers is crucial in timeout based systems. This is because if the timer is not stopped, it will generate unwarranted timeout error messages after what ever it is monitoring has successfully completed, causing a system to report or take action for conditions which are not present. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the practice and instructions for stopping timers into the system OS thereby creating a system which is less likely to create false error messages after a possible error causing occurrence has successfully completed.

As per claim 56, Os disclsoes,

receiving an indication that said first method has started (page 2, ¶18);

starting a timing mechanism in response to said step of receiving (page 2, ¶18);

reporting said first method as stalled if said timing mechanism is not stopped prior to a determination that said timing mechanism is overdue for said method (page 2, ¶27).

Os does not explicitly disclose:

receiving an indication that said first method has completed, if said first method has completed;

stopping said timing mechanism in response to receiving said indication that said

first method has completed;

Official Notice is given that was well known at the time of invention by computer

programmers provide instructions to stop timers and carry out the stopping of timers in

monitoring systems in timeout monitoring systems (the supplied supporting evidence

cited shows this 1992 I the ream of removing watchdog timer thread inserted by hooking

as taught by Os). Providing these instructions to stop timers is crucial in timeout based

systems. This is because if the timer is not stopped, it will generate unwarranted

timeout error messages after what ever it is monitoring has successfully completed,

causing a system to report or take action for conditions which are not present. Thus it

would have been obvious to one of ordinary skill in the art at the time of invention to

incorporate the practice and instructions for stopping timers into the system OS thereby

creating a system which is less likely to create false error messages after a possible

error causing occurrence has successfully completed.

As per claim 64, Os discloses:

receiving an indication that a particular routine has started (page 2,¶18);

reporting said first routine as stalled if said timing mechanism is not stopped prior

to a determination that said timing mechanism is overdue for said routine (page 2, ¶27).

Os does not explicitly disclose:

receiving an indication that said first routine has completed, if said first method has completed;

Official Notice is given that was well known at the time of invention by computer programmers provide instructions to stop timers and carry out the stopping of timers in monitoring systems in timeout monitoring systems (the supplied supporting evidence cited shows this 1992 I the ream of removing watchdog timer thread inserted by hooking as taught by Os). Providing these instructions to stop timers is crucial in timeout based systems. This is because if the timer is not stopped, it will generate unwarranted timeout error messages after what ever it is monitoring has successfully completed, causing a system to report or take action for conditions which are not present. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the practice and instructions for stopping timers into the system OS thereby creating a system which is less likely to create false error messages after a possible error causing occurrence has successfully completed.

As per claim 67. Os discloses:

said steps of receiving an indication that a particular routine has started and receiving an indication that a particular routine has completed include detecting whether a thread enters a method and does not return with an approximation of an expected time frame (¶28).

Response to Applicant's Arguments

I. As per claims 1-12 these claims are allowed for the reasons set forth in the appropriate section.

II. As per claim 52, Os changes the object by hooking into the object code path with additional compiled code spawning various monitoring threads. Applicant has not disqualified art which solely adds additional code without modification to the original code.

III. As per claim 58, Applicant's arguments are irrelevant as this claims is allowed for the reasons set forth in the appropriate section.

IV. As per claim 13, Applicant's arguments regarding a §102 rejection are moot as the claims is not rejected under ¶103.

V. As per claim 72, the Examiner has allowed this claim.

VI. As per claim 39, Os is using an object oriented program with multiple threads comprising an Application. Object oriented program requires the presence of an object, and therefor Os does in fact as at the object level.

VII. As per claim 45, Applicant's arguments regarding a §102 rejection are moot as the claims is not rejected under ¶103.

VIII. As per claims 39, 52-57 and 64-71, the Examiner at Applicant request will reinstate the previous rejection under 35 USC §101 should Applicant believe the rejection was in error and the claims originally filed were statutory.

IX. As per the response to the Official Notice. Supporting evidence in the form of four United States Patents with filing dates reaching back to 1992 is provided for Applicant as evidence, in lieu of a sworn affidavit from the Examiner. Patent No. 5,379,414 is of particular interest as is explicitly discloses the concept of unhooking a timer thread from a routine that has finished, thus preventing the unwanted timeouts described by the Examiner in the Official Notice. The reaming references also show the ubiquity of disabling timers after their useful life is over. Further, as Applicant has not traversed the rejections as a non-obvious combination, only the validity of the Examiner's choice of art, the motivation is considered valid in Applicant's view.

X. Applicant cited in the discussion of claim 1 an example from the specification of modifying existing code on pages 7-12. The Examiner points out that no where in that example was existing code modified, but in fact a wrapper composed solely of additional, new code was used. As such the system of the example is a not protected by claim 1, as changed existing code was not used to carry out the invention.

Reasons for Allowance

Claims 1-12, 58, 72, 75 and 77 are allowed.

Claims 14, 20-22, 24-26, 30-32, 41-43, -48-51 and 68-71 are objected to while containing allowable matter.

When viewed as a whole claims 1-12 overcome the prior art by requiring the presence and use of changed pre-existing code, unlike the example of page 7-12 of the specification of the system of Os which simply add additional code.

Applicant is reminded that claims are allowed as whole, in view each and every limitation contain in the claim and any intervening claims. This indication of allowable matter, may be jeopardized by any subsequent modification to the claims.

Final Disposition

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the
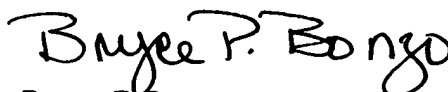
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bryce P Bonzo
Primary Examiner
Art Unit 2114